

*Professor Diane J. Burgess, Dept. of Pharmaceutical Sciences, School of Pharmacy.*

My name is Diane J. Burgess. I am a Board of Trustees Distinguished Professor, in the Department of Pharmaceutical Sciences, School of Pharmacy, University of Connecticut. I live in Storrs, CT. I have over 130 refereed publications in top-tier international journals, 29 book chapters, two edited books, over 410 research presentations at major international scientific meetings, over 210 invited lectures, and I have presented 15 keynote addresses world-wide. I was the 2010 President of the Controlled Release Society (CRS), the 2002 President of the American Association of Pharmaceutical Scientists (AAPS). I am an AAPS, CRS and American Institute for Medical and Biological Engineering (AIBE) fellow. I am also an international fellow of the Association of Pharmaceutical Science and Technology Japan (APSTJ). I am editor of the International Journal of Pharmaceutics and serve on the editorial boards of nine other international journals.

My research efforts focus on gene and drug delivery: specifically the engineering aspects of how to make advanced medicines, that can avoid the toxic side effects associated with many potent drugs and target these drugs to their site of action to improve efficacy as well as safety. This research is supported by federal funds and by the pharmaceutical industry. I collaborate with the Food and Drug Administration to develop standard testing methods to ensure the safety of these advanced medicines as well as to develop robust manufacturing methods that will help ensure the supply of high quality drug products. These research efforts will result in manufacturing cost savings that will positively impact health care costs, by reducing the cost of medicines. In addition, I am collaborating with colleagues in the University of Connecticut, Institute of Materials Science and the School of Engineering to develop a totally implantable biosensor for continuous measurement of glucose. This sensor will significantly improve diabetes management through enabling accurate glucose determination 24/7 and thus will allow prevention of life-threatening hypo- and hyper glycemic events as well as the many debilitating side effects associated with diabetes. This research has attractive considerable federal funding (US Army and NIH) and has lead to the founding of a University of Connecticut Start-up company – Biorasis, which currently employs 4 people. Biorasis mainly focuses on the development and commercialization of our implantable biosensor. In my laboratory in the Department of Pharmaceutical Sciences, I currently employ 8 graduate students and postdoctoral fellows and I am hiring two more graduate students this summer. These students live mostly in the Storrs and Willimantic area and one lives in Hartford.